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| /DG/ | 1 | 5081005 | , | 1992-01 | I-14 | Chakravorty et | tal. | | | | |
| /DG/ | 2 | 5114754 | | 1992-05 | 5-19 | Cronin et al. | | | | | , |
| /DG/ | 3 | 5194928 | | 1993-03 | 3-16 | Cronin et al. | | | | | |
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| /DG/ | 1 | PERFECTO, E. ET AL., Evaluation of Cu Capping Alternatives for Polyimide-Cu MCM-D, Elec. Comp. Tech. Conf., IEEE, 2001 | | | | | |
| /DG/ | 2 | PRASAD, K. ET AL., Multilevel Thin Film Packaging: Applications and Processes for High Performance Systems, Trans. Comp. Pac. Man. Tech Pt. B: Adv. Pac., IEEE, February 1994, pp. 38-49, Vol. 17, No. 1 | | | | | |
| /DG/ | 3 | SHIH, DY. ET AL., Cu Passivation: A Method of Inhibiting Copper-Polyamic Acid Interactions, Appl. Phys. Lett., September 16, 1991, pp. 1424-1426, Vol. 59, No. 12 | | | | | |
| /DG/ | 4 | OHUCHI, F. S. ET AL., Summary Abstract: Ti as a Diffusion Barrier Between Cu and Polyimide, J. Vac. Sci. Technol. A, May/June 1988, pp. 1004-1006, Vol. 6, No. 3 | | | | | |
| /DG/ | 5 | O'SULLIVAN, E. J. ET AL., Electrolessly Deposited Diffusion Barriers for Microelectronics, IBM J. Res. Develop., September 1998, pp. 607-620, Vol. 42, N. 5 | | | | | |
| /DG/ | 6 | SRINIVASAN, R. ET AL., Ultraviolet Laser Ablation of Organic Polymers, Chem. Rev., 1989, pp. 1303-1316, Vol. 89 | | | | | |
| /DG/ | 7 | KOWALCZYK, STEVEN P. ET AL., Polyimide on Copper: The Role of Solvent in the Formation of Copper Precipitates, Appl. Phys. Lett., February 1988, pp. 375-376, Vol. 52, No. 5 | | | | | |
| /DG/ | 8 | KIM, YH. ET AL., Adhesion and Interface Investigation of Polyimide on Metals, J. Adhesion Sci. Technol., 1988, pp. 95-105, Vol. 2, No. 2 | | | | | |
| /DG/ | 9 | LEE, KW. ET AL., Adhesion of Poly(arylene ether benzimidazole) to Copper and Polyimides, J. Adhesion Sci. Technol., 1996, pp. 807-821, Vol. 10, No. 9 | | | | | |

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| Attorney Docket Number | | YOR920030029US2 (16841) | | |

| /DG/ | 10. | MATIENZO, LUIS J. ET AL., Adhesion of Metal Films to Polyimides, IBM Corp., Endicott, NY | | | | | |
|---|---|---|--------------------|--|--|--|--|
| /DG/ | 11 | LINDE, H. G., Adhesive Interface Interactions Between Primary Aliphatic Amine Surface Conditioners and Polyamic Acid/Polyimide Resins, J. Poly. Sci.: Poly. Chem. Ed., 1982, pp. 1031-1041, Vol. 20 | | | | | |
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